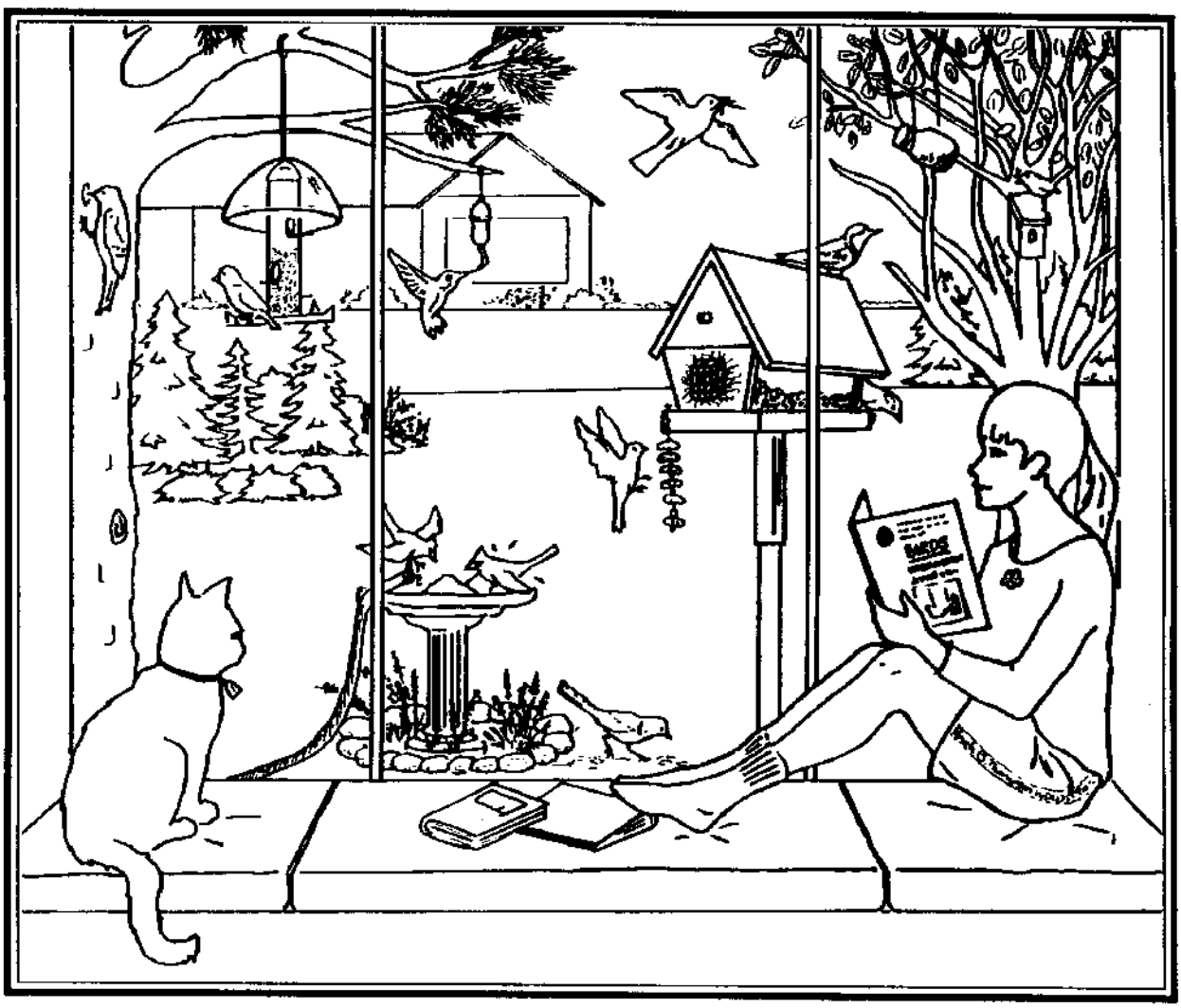
# BACKYARDS FOR BIRDS



Name: _____

**By Stephen Penland, Urban Wildlife Program**

**Washington Department of Wildlife**
**Serving Washington's wildlife and people — now and in the future**

# BACKYARDS FOR BIRDS

## Ways to Attract Wild Birds to Your Backyard

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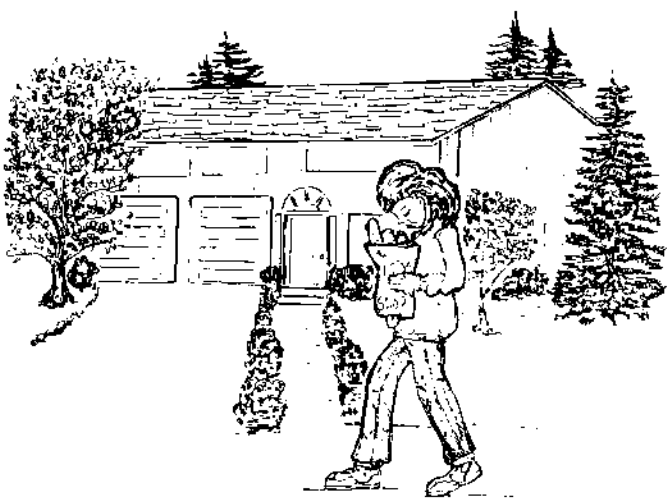
# HABITAT IN YOUR BACKYARD

## What is *habitat*?

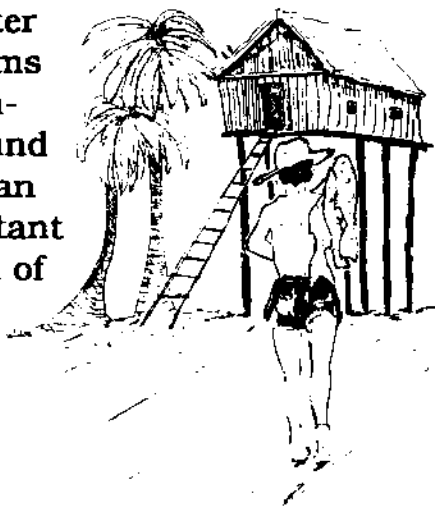
"Habitat" is something that is important to all birds. A bird's habitat is where it lives....where it gets **food**, finds **water**, and finds **shelter**. Habitat is where a bird spends its life.

You have your own habitat, too. The most important part of your habitat is probably your home. At home you are sheltered from winter storms and other bad weather. Your home also provides water whenever you turn on the faucet. If you grow food in a garden, that is part of your habitat too. If you go to the grocery store for food, the store is part of your habitat. You

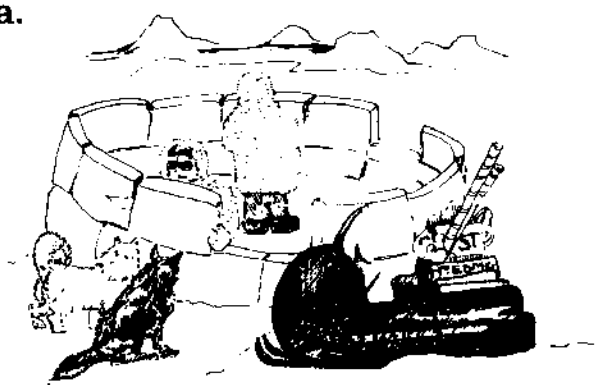


can probably think of other places where you spend a lot of time playing, learning, and working, such as at school, your friend's house, neighbors' yards, or nearby parks. All of these places are part of your own habitat.

People in other parts of the world have their own habitat, and their habitat may be much different than yours. A boy living on a tropical island in the Pacific Ocean may have a grass hut as the most important part of his habitat. The hut provides shelter from tropical storms and from biting insects that fly around at night. The ocean is probably important too, because most of his food may be fish from the sea.

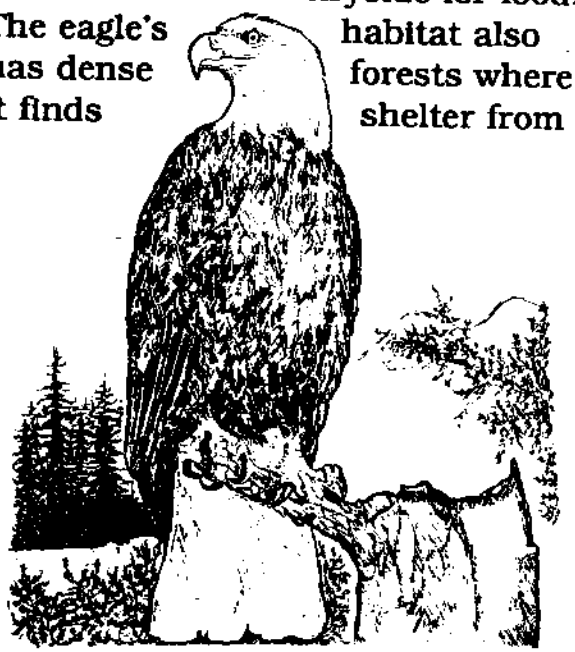


An Eskimo girl in the Arctic lives in a very different habitat. She keeps warm in a house made of wood and animal skins. During part of the year she may live in an igloo made of ice blocks. Instead of going to a grocery store, her family hunts for food on the tundra. She also plays with friends on the tundra.



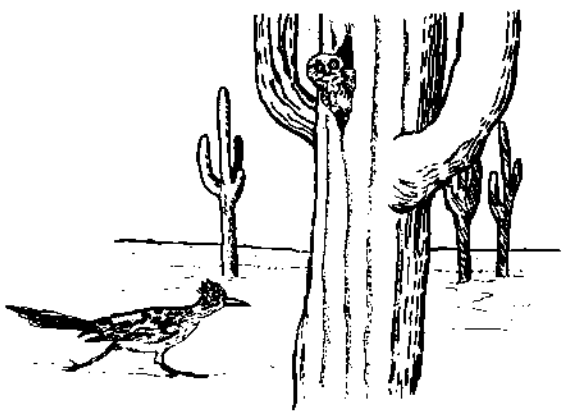
An animal's habitat has to provide three things: *food*, *water*, and *shelter*. Different animals have different kinds of habitat. For the robin living in the city, its habitat is made up of lawns where it looks for food and shrubs where it makes nests and seeks shelter. Robins also use houses and trees where they sing and watch for danger. Robins use puddles in the street or yard for water to drink.

The bald eagle has a very different kind of habitat from the robin. The eagle's habitat has very tall trees where it builds its nest and looks over the countryside for food. The eagle's habitat also has dense forests where it finds shelter from winter storms, and lakes and streams where it finds water and fish to eat. The habitat of the robin is much smaller than the eagle's habitat. But both habitats provide what each of these birds need: food, water, and shelter.



Other kinds of habitats that you may have heard about in the Pacific Northwest are wetlands, sagebrush deserts, and farmland. Each of these habitats has different kinds of animals because each habitat has the special kind of food, water, and shelter they need to survive.

If we could travel around to different parts of the world, we would find even more kinds of habitats. Some examples are hot deserts, tropical forests, dry grasslands, and open oceans. Can you name some of the animals in these habitats?

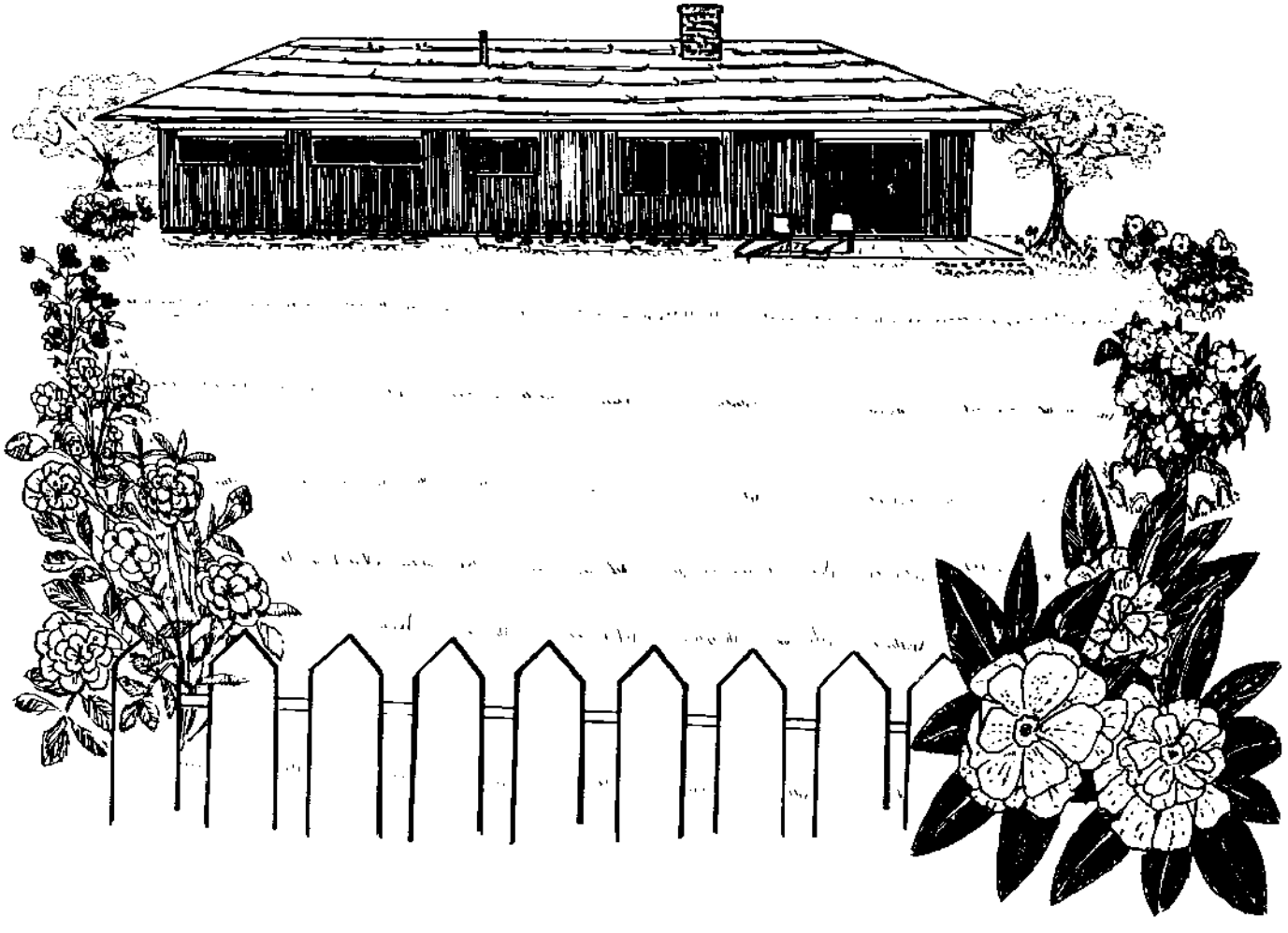


## Habitat in your own backyard

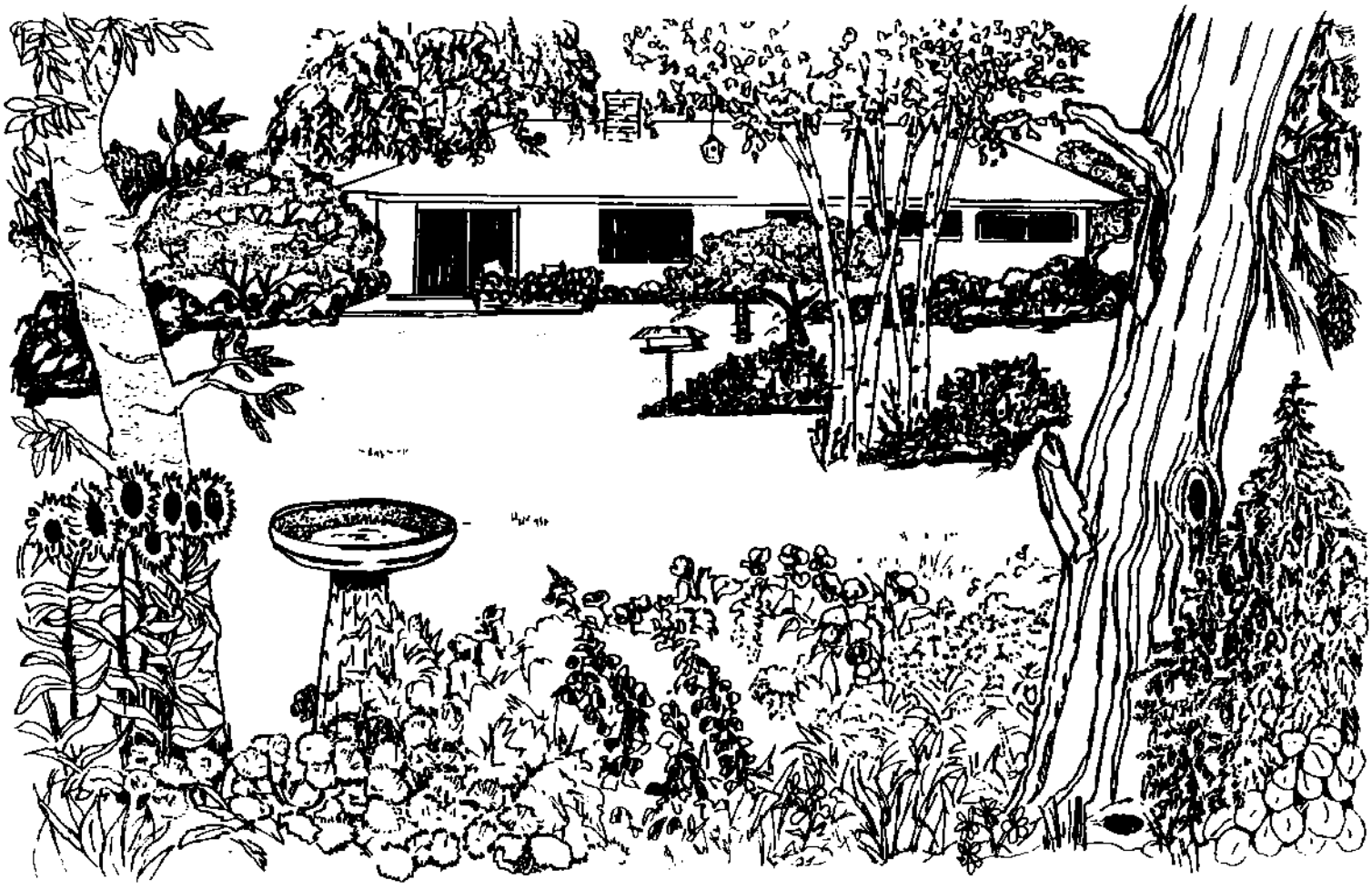
Lets get back to the habitat that you see every day - your own backyard. If you were a bird looking at your own backyard, what would you see? Would your yard be a good place to live? Or would you rather fly to a different yard with different habitat to look for food and build a nest? Let's try this with two imaginary yards, one belonging to Mike and the other to Stacy.

Mike's yard has a lot of rhododendron shrubs and beautiful rose bushes in front and back, and an apple tree by the driveway. There is a lot of grass for Mike to play on, too. His house is in pretty good condition, except for a small hole underneath the eave near the front door.

# MIKE'S YARD



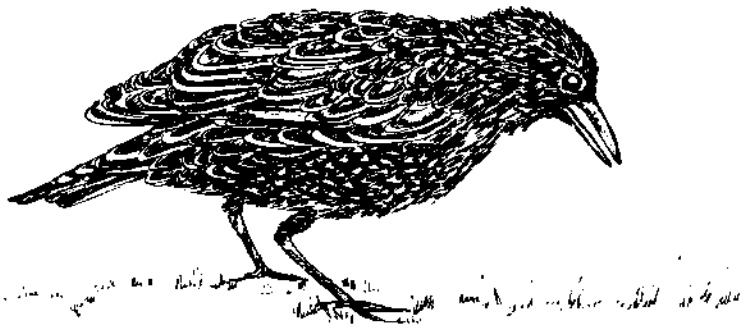
# STACY'S YARD



Stacy's house and yard are exactly the same size as Mike's, but they look very different. Stacy's yard has birch trees, cedar trees, pine trees, cherry trees, and many kinds of shrubs under these trees all over the yard. One of the trees is very old and has some dead branches that have broken off near the trunk.

If you were a bird looking for a place to live, which yard would you want to live in? Well, that **depends**. It depends on what kind of bird you were.

Suppose you were a **starling**. You would want a large, grassy area where you can look for grubs and other insects in the ground.



You would also like to build a nest inside a hole, especially one that is in a building.

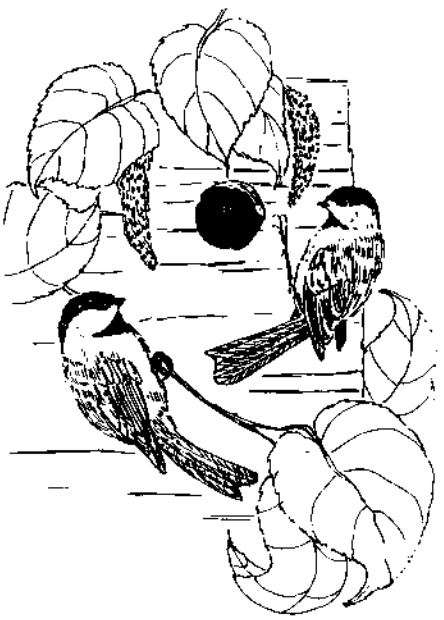
Mike's yard seem to have all of these things. There is lots of open grass. There is also an opening under the eave near the front door where you could build a nest. Being a starling, you will probably choose Mike's yard as your perfect habitat.

But what if you were a **chickadee**? Chickadees like to eat insects, and they look for them on the leaves and branches of trees and shrubs. Chickadees hardly ever hop around on the ground, so grassy areas aren't any good for them.

Chickadees like to nest in cavities, but they never use cavities in buildings. Instead, they look for holes in trees. Sometimes they dig their own cavity in soft parts of trees.

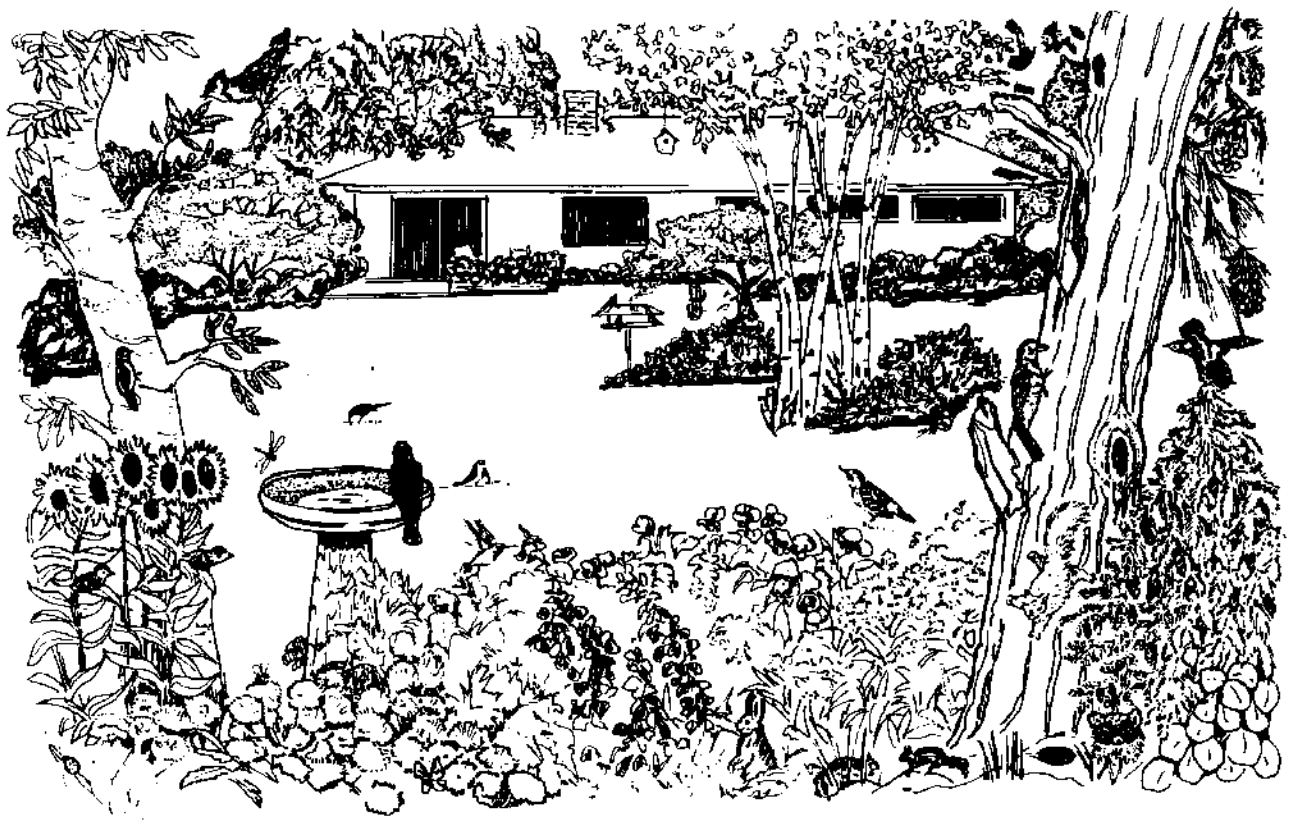
Flying over Mike's house, the only plants you see are rhododendrons and rose bushes. Sorry, but these plants don't have many insects on them. Also, Mike's parents think all insects are bad, so they spray to kill insects in their yard.

There aren't many leaves and branches on rhododendrons and roses, so these don't provide good shelter for chickadees. There are no large trees in Mike's yard, so there is no place for you to build a nest. It looks like Mike's yard will not be good habitat for a chickadee.



However, Stacy's yard seems to be great. There are lots of trees and shrubs where you can look for insects. The trees will give you shelter from the wind, rain, and cold temperatures. You can even dig a cavity in the large trees where the old limbs have fallen away. Stacy has even put out a bird bath for you! Her yard is perfect chickadee habitat because it has the kinds of food, water, and shelter chickadees need.

Most of the birds in your neighborhood are like the chickadee - they like lots of trees and shrubs. They will choose a yard like Stacy's. Remember this when you try to make your yard better for wildlife.



## Things To Do To Make Your Yard Better For Wildlife

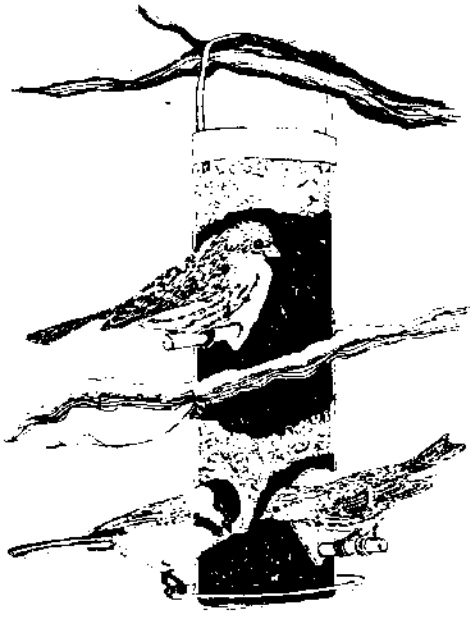
- Plant trees and shrubs. **Lots** of them! Most birds need trees and shrubs for food and shelter.
- Save dead trees (snags), or large, decaying trees. Some birds use these to dig out a cavity to make a nest. What are some other ways that birds might use large, old trees?
- Add bird feeders to your yard. See page 7.
- Add bird houses, especially if your yard doesn't have any snags. See page 10.
- Keep your cat indoors, especially in summer when baby birds are learning to fly. Birds also need protection from cats in winter when they flock around birdfeeders. Bells on a cat's collar might help the birds. If your neighbor's cat is the problem, ask them to help you protect wildlife from their cat.
- Add water to your yard. Lots of birds would like a simple bird bath.
- Make sure your house is in good repair so that house sparrows and starlings won't nest in any small openings. These birds can be harmful to other birds by eating too much of the food. They also may take over the bird houses or cavities in trees where other birds need to nest.
- Ask your parents to be very careful with insect sprays. These sprays should only be used when adults are **absolutely, positively** sure that insects are causing a serious problem and that there is no other way to control these insects. Remember, most insects either help us or they do us no harm. Also, insect sprays kill both the good insects as well as the bad ones, and many birds need these insects to live.

# FEEDING BIRDS

## Birds need food

Many birds eat insects found on trees and shrubs. Other birds eat the seeds and fruits on these trees and shrubs. Sometimes trees are cut down and shrubs removed to make way for houses and streets. When this happens, the food needed by birds is also removed. Without enough food, many birds will die and the area will have fewer birds.

Your neighborhood probably has many houses and streets where there used to be lots of trees, shrubs, and other plants. There are probably fewer birds there now than there used to be before the houses were built. That is why the most important thing you can do to help birds is to have lots of trees and shrubs in your yard.



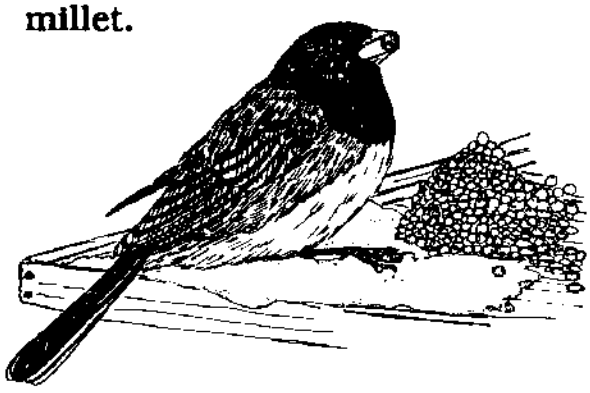
Another way you can help birds in your neighborhood is to provide food for birds. The food that you put out in a bird feeder will help to replace the food that birds used to find in the trees and shrubs.

## When to feed birds

Birds have the hardest time finding food during winter. This is especially true at the end of winter when most of the food has been used up. The best time to start feeding birds is in October or November. The birds need your help the most during February and March.

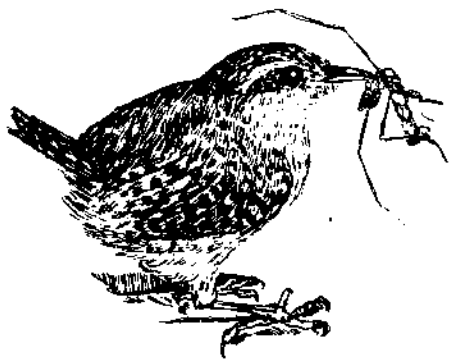
## What to feed birds

**Seeds**. During the winter, most birds eat seeds. Some birds like small, hard seeds like millet. Sparrows, towhees, and juncos like millet.



Other birds like the larger, softer sunflower seeds. Chickadees, finches, and grosbeaks like sunflower seeds. When you feed different kinds of seeds to birds, watch closely to see which seeds are their favorite.

**Suet.** Birds that eat insects have a hard time during winter, because insects are very hard to find during cold weather. Also, it is hard for you to buy bugs and spiders at the store to put in a bird feeder!

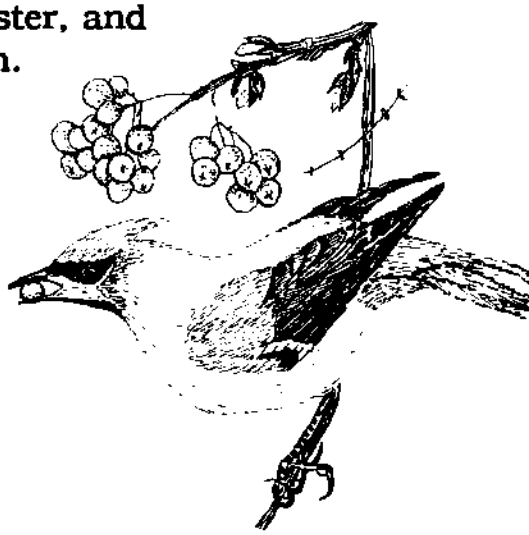


But many of these birds will eat suet. Suet is the fat found around the kidneys in cows and sheep. A butcher shop is a good place to get suet. The fat that collects in the pan when you fry hamburgers can be used instead of regular suet. Suet can be melted, poured into cupcake molds, and then stored in the freezer until you want to give it to the birds. Chickadees, nuthatches, and woodpeckers really like suet.

**Try this suet recipe**

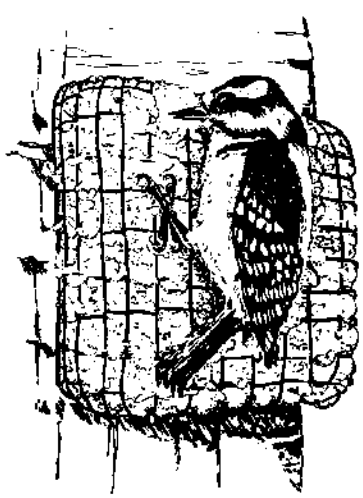
1. Melt 2 cups suet. Remove from heat, let cool. Melt it again.
2. Blend in 1 cup yellow cornmeal and 1 cup peanut butter. Optional: add millet, hulled sunflower seeds, or chopped fruits.
3. Pour into molds, allow to harden.
4. Serve in your favorite suet feeder.

**Fruit.** Some birds like to eat fruit. The robin and cedar waxwing are especially fond of berries. If you have plants with fruits, these birds will probably visit your yard. Some trees that have fruits are hawthorn, dogwood, and holly. Some shrubs with fruits are blackberry, elderberry, huckleberry, cotoneaster, and firethorn.



**Other food.** Some birds like peanut butter just like many kids. Peanut butter can be mixed with cornmeal or oatmeal and put out in a bird feeder just like suet.

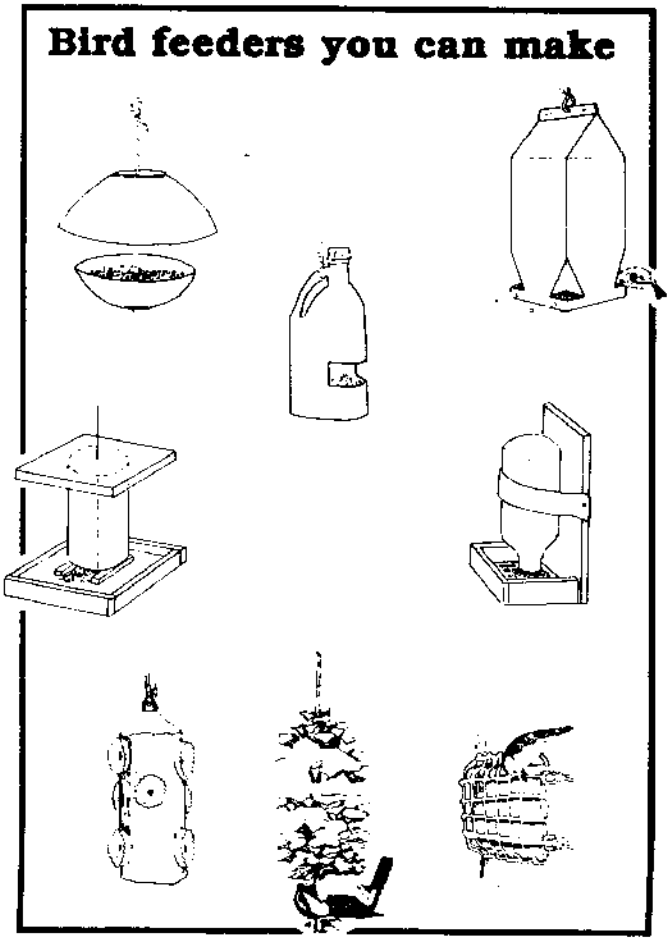
People sometimes give bread or donuts to birds. But this is not a good idea. Bread often attracts starlings and house sparrows, and these birds may harm other birds.



## Bird feeders

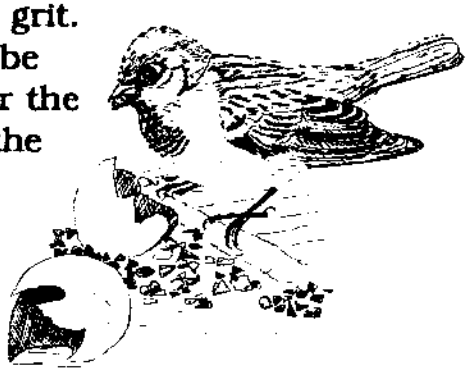
Some birds like to eat seeds on the ground (no table manners!), so they don't need any special kind of bird feeder. Towhees, juncos, and sparrows will eat the seeds that you scatter on the bare ground. Other birds like to eat seeds that are placed higher up in feeders. You should have several kinds of feeders at different places in your yard. That way, birds can choose their favorite spot where they are most comfortable.

Suet can be put in mesh bags, like an onion bag, and then hung from a tree branch or by a window. You can also place the bag or other wire mesh container on a tree limb or next to the tree trunk. Suet can be softened by heating and then smeared onto a hanging pine cone.



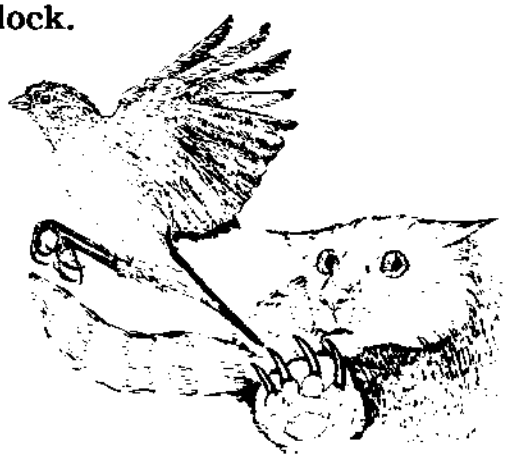

## How do birds chew?

Birds don't have teeth to chew their food. But seeds are very hard and they have to be ground up for digestion. Birds solve this problem by swallowing *grit*. Grit is small pieces of sand, gravel, or other hard things. These act like miniature grinding wheels in the bird's gizzard (stomach) which churns and mashes the food. Sand, crushed oyster shells, and broken eggshells make good grit. These can be placed near the feeder for the birds.



## Beware of cats!

Most birds like to have trees and shrubs close by where they can escape if predators, like hawks or cats, come too close. But cats can hide in shrubs. If bird food is put too close to these hiding places, the birds will be within easy reach of cats. Try to leave 10 feet or more between any feeder and dense shrubs. That way a bird will have a good chance to spot a sneaking cat and give warning to the rest of the flock.



# MAKING BIRD HOUSES

Most birds build a nest in a tree or shrub. The nest is usually like a small bowl made of grasses and lined with soft plants, hair, or feathers. Sometimes a bird will add mud or twigs to the nest. If you want to help these birds, your yard should have trees and shrubs for them. You can also put out pieces of string, yarn, and dog hair for the birds to use in building their nest during April and May.

Some birds don't like to nest out in the open on the limb of a tree or shrub. Instead, they like to nest inside a hole in a tree. These are the *cavity-nesting* birds.

Some cavity-nesting birds make their own cavity by using their beak like a hammer and chisel to hollow out a space in a tree. A woodpecker is one kind of bird that makes its own cavity. The wood needs to be soft or a little rotten. Trees with soft or rotten wood are usually old. Dead trees that are still standing are called *snags*. Snags are very important to cavity-nesting birds because the wood can be chiseled out more easily.

Other cavity-nesting birds don't make their own cavity. Instead, they have to find a cavity that has already been made by a woodpecker. Sometimes a cavity is formed when a branch breaks away from a tree, and this can also be used as a place for a nest. Some birds that look for ready-made cavities are wrens, chickadees, owls, nuthatches, wood ducks, bluebirds, and violet-green swallows.

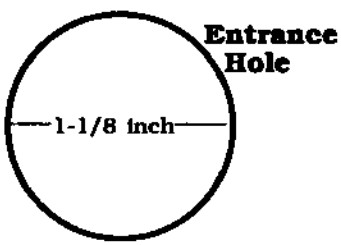
If the trees in your yard don't have cavities, you can make a bird house for the cavity-nesting birds to use. The bird house will take the place of cavities that were in trees in your neighborhood before your house was built.

## Materials

Wood is the best material to use for bird houses. It helps to keep the birds warm in cool weather as well as cool in hot weather. The wood from fir and hemlock is the least expensive. Cedar is more expensive but will last longer. Don't use plastic or metal - they get too hot for the eggs and baby birds.

## Design

The most important part of the bird house is the size of the entrance hole. If it is too large, the bird house might be taken over by house sparrows and starlings. If it is too small, no birds will be able to get inside. For most of the small cavity-nesting birds in Washington, the entrance hole should be about one and one-eighth inch in diameter. Larger birds will need larger holes.




The roof should be slanted so rain will not get inside. One side should be hinged so that the bird house can be opened for cleaning. The other sides should be sealed to keep out water. Drill some holes (about one-quarter inch in diameter) near the top and in the floor for fresh air to circulate and for water to drain out. Finally, make some grooves on the inside of the bird house below the entrance hole. This will give the baby birds something to grip when they need to climb out of the house.

## When is the best time?

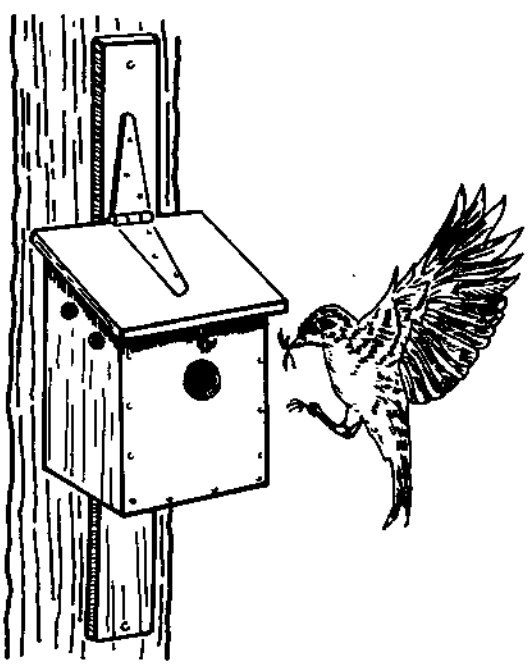
Bird houses should be put up in March and April. That is when migrating birds are returning from the south. It is also the time when most birds are looking for nest sites.

Birds are usually finished nesting by the end of July. The bird houses should then be taken down and cleaned. Cleaning will get rid of lice, mites, and other small bugs that are harmful to baby birds.

You might want to put the nest boxes back up during the winter months. Birds will sometimes use a nest box for shelter during cold weather.

## Where is the best place?

Most bird houses should be put up in a tree where there is some shade but where the adult birds can easily fly to the entrance hole. Sometimes a bird house on a pole in the middle of a shrub will attract a cavity-nesting bird. Houses for bluebirds should be out in the open on a post or tree trunk.



## Which birds will you get?

Remember that you will have certain birds in your neighborhood **only if** the kind of habitat they need is there. It is hopeless to expect a bird that likes the forest to come to a bird house in your yard if there are no trees around. The best bet in most cities and towns in Washington is to put up bird houses made for chickadees, wrens, and violet-green swallows. These birds are the most common cavity-nesters in many neighborhoods. If your neighborhood has special habitat, you might be able to attract other kinds of cavity-nesting birds.

### *Common Cavity-nesting Birds in Backyard Habitats*

**Violet-green Swallow**. *Found in many kinds of neighborhoods; needs open space to fly.* Lays 4 to 5 white eggs. Eats flying insects. Found in Washington only in spring and summer.

**Black-capped Chickadee**. *Found in areas with some trees.* Fairly common in most neighborhoods. Nest is made of moss, with a cup of fur, feathers, and grasses. Lays 6 to 8 white or creamy eggs. Eats insects in summer, seeds (especially sunflower seeds) in winter.

**House Wren**. *Found in areas with lots of dense shrubs.* More common in eastern Washington than western Washington. Nests in any cavity - even the back pockets of pants hanging on a clothesline! Lays 5 or 6 white and speckled eggs. Eats insects. Found in Washington only during the spring and summer. Spends most of its time near the ground.

**Bewick's Wren**. *Found in areas with lots of shrubs and evergreen trees.* Does not occur in eastern Washington. Lays 5 to 7 white, speckled eggs. Eats insects. Spends most of its time near the ground.

### *Uncommon and Rare Cavity-nesting Birds*

**Red-breasted Nuthatch**. *Found in areas with lots of evergreen trees.* Smears tree sap around entrance hole. Lays 5 to 6 whitish eggs, usually speckled. Eats insects in summer, seeds in winter.

**Chestnut-backed Chickadee**. *Found in areas with lots of evergreen trees.* Nest is made of moss with fur, feathers, and grasses. Lays 6 or 7 white eggs, sometimes speckled. Eats insects in summer, seeds in winter.

**Tree Swallow**. *Usually found near water, especially a pond or lake.* Less common than violet-green swallow in most neighborhoods. Lays 4 to 6 white eggs. Eats flying insects.

**Western Bluebird**. *Found in large fields, pastures, and other open areas.* Looks for insects on the ground in short or sparse grass. Most common in rural areas. Much more common in eastern Washington. Lays 4 to 6 blue eggs. Occurs only in spring and summer.

**Western Screech-Owl**. *Found in areas with many trees, especially undeveloped land.* Lays 4 to 5 white eggs. Eats mice, voles, other small mammals.

**Northern Flicker**. *Found in areas with scattered trees, especially undeveloped land.* Lays 6 to 8 glossy white eggs. Eats insects, especially ants.

**Downy Woodpecker**. *Found in open woodlands and natural parks.* Lays 4 glossy white eggs. Eats insects. The **Hairy Woodpecker** is similar; it is usually found in forests.

**American Kestrel**. *Found in rural open areas with scattered trees.* Lays 4 to 5 white eggs. Eats small rodents and insects.

**Wood Duck**. *Found near woodland streams and ponds.* Lays 8 to 10 white eggs. Occurs in Washington during the spring and summer months.

**Purple Martin**. *Very rare; found near ponds and lakes.* Lays 4 to 5 white eggs. Eats flying insects.

## What should you do about House Sparrows & Starlings?

House sparrows and starlings are very common in most areas where people live. But when the Pilgrims first settled in this country in the 1600's, there were no house sparrows or starlings in North America. Both of these birds were brought over from Europe in the 1800's. After they were released, their numbers increased and they gradually spread across the entire country. House sparrows reached Washington in 1897, but starlings didn't come here until around 1950.

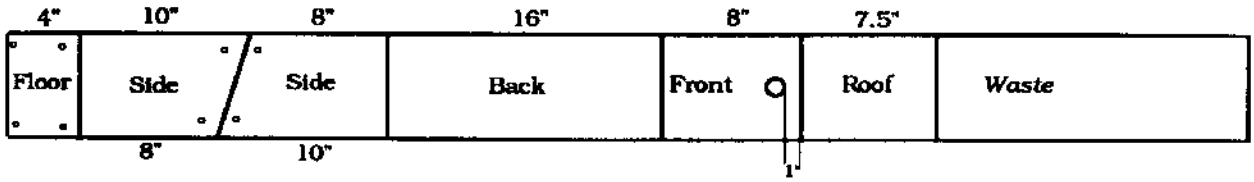
Unfortunately, house sparrows and starlings also like to nest in cavities. They will even kick out a chickadee, wren, or other bird that happened to be there first. When this happens, the chickadees and wrens have fewer places to nest. In many areas house sparrows and starlings have taken over and other cavity-nesting birds have died out completely.

If you build a bird house for chickadees or wrens, the entrance hole will be small enough to keep out house sparrows and starlings. House sparrows need an entrance hole about one and one-quarter inch. Starlings need an opening about one and three-quarters inch in diameter.

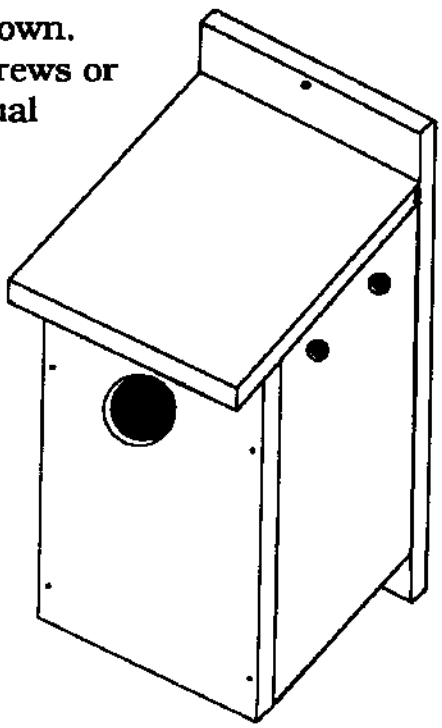
But if you build a bird house for flickers, owls, swallows, and other larger birds, then house sparrows or starlings may also want to use the same house. If this happens, you must decide what actions you will take. As a habitat manager, will you allow the house sparrows and starlings to nest, and then hope the other birds will come back later? Or will you remove the nest of a house sparrow or starling before their eggs hatch to make way for the owl, flicker, or other cavity-nesting bird? These decisions are not always easy to make, but you have to decide.

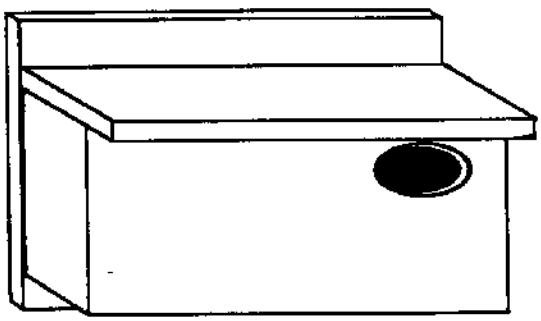
# NEST BOX DESIGNS FOR CHICKADEES, WRENS, & SWALLOWS

## Nest box for chickadees and wrens

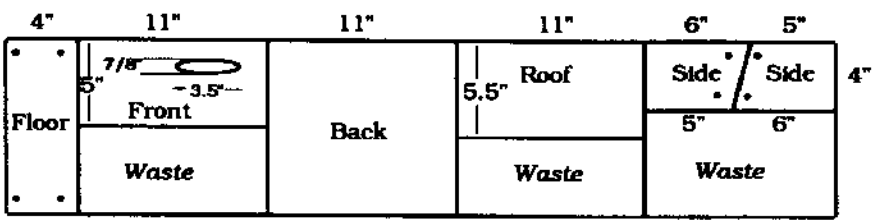



One six-foot 1" x 6" (nominal size) board, cut as shown. Entrance hole is 1-1/8 inches in diameter. Use screws or hinges to connect roof so it can be opened for annual cleaning.



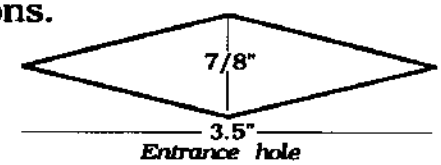


## Nest box for Violet-green Swallows




One four-foot 1" x 10" (nominal size) board, cut as shown.
Note: cut exactly on lines (the pieces total four feet). If the last piece is too short for one of the sides, use one of the waste pieces.

The entrance hole is oval, 7/8" high and 3.5" wide. A diamond-pattern could also be used with the same dimensions.
Use screws or hinges to connect roof so it can be opened for annual cleaning.



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